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10/590,982

08/28/2006

Ikuo Mimura

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04/02/2009

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EXAMINER

HIGGINS, GERARD T

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

04/02/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,982	Applicant(s) MIMURA, IKUO	
	Examiner GERARD T. HIGGINS	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 7-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed 01/20/2009 has been entered. Currently claims 1-3 and 7-9 are pending and claims 4-6 are cancelled. It is noted by the Examiner that the nomenclature for the substituents R_2 and R_3 in claim 1 are different than that originally disclosed in applicants' specification (e.g. "methoxycarbonyl" versus "methyl carboxylate" etc.); however, they are chemically identical, and therefore the Examiner has not objected to their usage.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because of reference characters:

- a. **"21," "1," and "31"**
- b. **"22" and "4"**
- c. **"6," "27," and "28"**
- d. **"3," "24," and "33"**
- e. **"5," "23," and "37"**
- f. **"26" and "39"**
- g. **"2" and "32"**
- h. **"11" and "34"**
- i. **"13" and "35"**

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j. “16” and “36”

These reference characters have all been used to designate the **same** respective parts. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claims 1, are objected to because of the following informalities:
 - a. With regard to claims 1, the phrase “installed within light-reflective resin sheet” on the sixth and seventh lines of the claim is awkward. Perhaps applicants meant “installed within **said** light-reflective resin sheet.”Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

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art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 2 and 7-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With regard to claim 2, the Examiner does not find support for stating that "the light-reflective resin sheet comprises a retroreflective sheeting layer formed of micro glass beads and a specular reflective layer is installed on at least a portion of a lower surface of the micro glass beads nearer said auxiliary substrate via said destructive layer and a focusing layer." The Examiner does not find support for saying that "the light-reflective resin sheet **comprises** a retroreflective sheeting layer formed of micro glass beads." The Examiner also does not find support for claiming "nearer said auxiliary substrate." Applicants' attention is drawn to page 13, lines 1-7 of their specification, which states that the light-reflective resin sheet **is** a retroreflective sheeting layer formed of micro glass beads. Perhaps applicants meant "the light-reflective resin sheet comprises glass beads and a specular reflective layer is installed on the glass beads via said destructive layer and a focusing layer."

With regard to claim 7, the Examiner does not find support for claiming that the communication antenna is installed on the back of the display device "away from said surface protection layer." The Examiner does not find support in the specification as

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originally filed; further, the Examiner does not find an explanation for the location "away from said surface protection layer" in the specification as originally filed.

With regard to claim 8, the Examiner does not find support for saying that "a portion of the specular reflective layer that overlaps with a portion of the light-reflective resin sheet on which the active or passive type RFID device equipped with a communication antenna is installed, is removed." The Examiner specifically does not find support for saying that the specular reflective layer is removed for the entire RFID device; further, the Examiner only finds support for saying that the specular reflective layer is removed in zones which overlap with the communication antenna (see page 14, lines 28-35 of applicants' specification). The Examiner apologizes for the confusion with regard to the previously made 35 U.S.C. 112, second paragraph rejection regarding lack of antecedent basis in this claim. Perhaps applicants meant "wherein a zone of the specular reflective layer which overlaps with the communication antenna is removed." Please note that the phrases "overlapping with the region of the light-reflective resin sheet" and "that overlaps with a portion of the light-reflective resin sheet" are superfluous to this claim and may lead the claim to be awkward (see page 14, lines 28-35 of applicants' specification).

With regard to claim 9, the Examiner does not find support for saying that "specular reflective layer is installed within a portion of the light-reflective resin sheet forming said RFID device equipped with a communication antenna." Once again the Examiner apologizes for the confusion with regard to the previously made 35 U.S.C. 112, second paragraph rejection regarding lack of antecedent basis in this claim.

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Applicants are not supported for saying that the specular reflective layer is forming both the RFID device and the communication antenna (see page 15, lines 21-30 of applicants' specification). Perhaps applicants meant "wherein the specular reflective layer is installed within a portion of the light-reflective resin sheet to form said communication antenna."

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the reflective resin sheet" in ninth line of the claim. There is insufficient antecedent basis for this limitation in the claim. Perhaps applicant meant "the light-reflective resin sheet."

With further regard to claim 1, the phrase "via a substrate adhesive layer" on the fourth line of the claim renders the claim indefinite. Applicants have already introduced a substrate-adhesive layer on the second and third lines of the claim, and therefore it is unclear if this is meant to be the same layer or a further layer. Perhaps applicants meant "via **the** substrate-adhesive layer."

With regard to claim 2, the term "micro glass beads" is a relative term which renders the claim indefinite. The term "micro glass beads" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and

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one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. One of ordinary skill would not be immediately apprised of the distances that would be considered to be “micro.” The term is unclear.

With regard to claims 7 and 8, the phrase “active or passive **type** RFID device” renders the claim indefinite. It is unclear what other items are to be considered of passive type RFID. It has been held that “[t]he addition of the word “type” to an otherwise definite expression (e.g., Friedel-Crafts catalyst) extends the scope of the expression so as to render it indefinite. *Ex parte Copenhagen*, 109 USPQ 118 (Bd. App. 1955); likewise, the phrase “ZSM-5-type aluminosilicate zeolites” was held to be indefinite because it was unclear what “type” was intended to convey *Ex parte Attig*, 7 USPQ2d 1092 (Bd. Pat. App. & Inter. 1986).” Perhaps applicants meant “active or passive RFID device.”

Claim 7 recites the limitation “said surface protection layer” in the third and fourth lines of the claim. There is insufficient antecedent basis for this limitation in the claim. Perhaps applicants meant “said surface-protective layer.”

With further regard to claim 7, the phrase “installed on the back of the display device away from said surface protection layer” renders the claim indefinite. It is unclear where a surface would have to be to be “away from” a layer. Perhaps applicants meant “installed on ~~a~~ back of the display device, which is a side opposite from said surface-protective layer.”

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hingsen-Gehrmann et al. (US 2002/0142121) in view of Yamamoto et al. (US 2002/0036359) and Shimizu (JP 10-055147).

With regard to claim 1, Hingsen-Gehrmann et al. disclose the tamper-indicating articles, which read on applicants' display device, of Figures 1, 2, and 5.

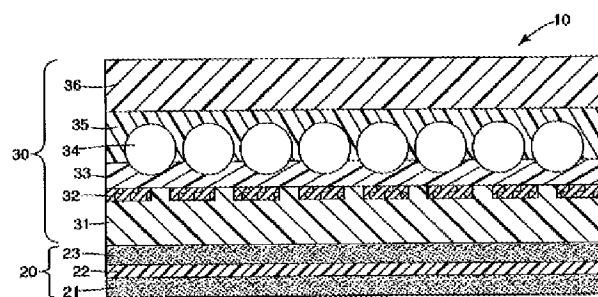


Fig. 1

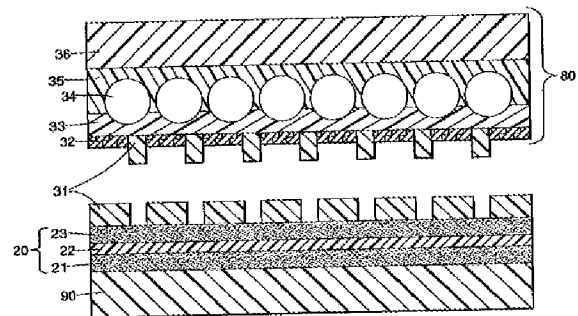


Fig. 2

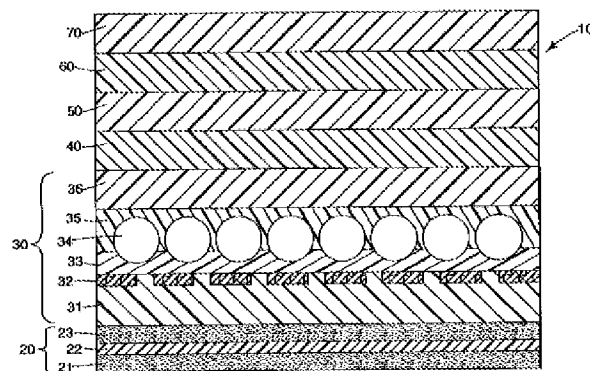
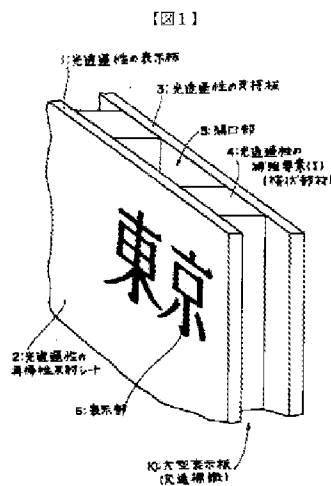


Fig. 5

The device is comprised of a top film **70**, which reads on applicants' surface-protective layer, a print layer **60**, which reads on applicants' information display layer, a retroreflective sheet **30**, which reads on applicants' light-reflective resin sheet, and an adhesive layer **20**, which reads on applicants' substrate adhesive layer [0034]-[0052], [0069] and [0079]. There is a reflective layer **31**, which reads on applicants' specular reflective layer, that is a part of the retroreflective sheet **30** that also has a release layer **32**, which reads on applicants' destructive layer installed on one side thereof, and the device is installed on an substrate **90**, which reads on applicants' installation substrate, via the adhesive layer; further, when the device is tampered with it results in the structure seen in Figure 2 [0072]. Hingsen-Gehrmann et al. teach that their release layer is preferably made of polyesters [0059]. There is a destructive effect wherein separation takes place between the release layer and one of the other layers constituting the retroreflective sheet; however, Hingsen-Gehrmann et al. fail to disclose an auxiliary substrate between the display device and the installation substrate, and they also fail to disclose the polymer resins of the destructive layer as claimed.

Shimizu discloses further reinforcement-elements **4**, which reads on applicants' auxiliary substrate, between the plotting board **1**, which reads on applicants' display device, and a support plate **3**, which reads on applicants' installation substrate. Please see Figure 1, Abstract, and [0021].



The auxiliary substrate can be mechanically fixed on the installation substrate [0021]; further, one of ordinary skill would understand this to be intrinsic in the reference, otherwise the sign would fall to the ground.

Since Hingsen-Gehrmann et al. in view of Yamamoto et al. and Shimizu are drawn to display devices; it would have been obvious to one having ordinary skill in the art at the time the invention was made to adhere the display device of Hingsen-Gehrmann et al. in view of Yamamoto et al. onto the auxiliary substrate of Shimizu. The motivation for doing so would be that one could then create a display device that was as thin and reflective as possible, while maintaining an overall display structure that had weatherability and rigidity.

Yamamoto et al. disclose that resins based on cyclopentane ring residues and polyester resins are exchangeable in optical articles [0025] to [0035]. They state that the residues are known for toughness and transparency, both important qualities for optical articles [0026] and [0033]. The hydrocarbon based residues has a small optical anisotropic effect [0042]. One of ordinary skill would recognize that all of these effects would be crucial in retroreflective display articles.

Since Hingsen-Gehrmann et al. and Yamamoto et al. are both drawn to optical articles; it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the hydrocarbon based resins such as cyclopentane, norborene, or adamantane of Yamamoto et al. for the polyester based resins of Hingsen-Gehrmann et al. The motivation for doing so would be to result in an optical article in excellent transparency, toughness, and small optical anisotropic effects.

With regard to the limitation that "said display device being a number plate," the Examiner notes that while there is no disclosure that the tamper-indicating article is an "number plate" as presently claimed, applicants attention is drawn to MPEP 2111.02 which states that "if the body of a claim fully and intrinsically sets forth all the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction". Further, MPEP 2111.02 states that statements in the preamble reciting the purpose or intended use of the claimed invention must be evaluated to determine whether the purpose or intended use results in a structural

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difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

It is the examiner's position that the purpose or intended use, i.e. as a "number plate," recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art tamper-indicating article and further that the prior art structure which is a display device identical to that set forth in the present claims is capable of performing the recited purpose or intended use; furthermore, the Examiner directs applicants' attention to [0004] of Hingsen-Gehrmann et al. which states that retroreflective sheets like the ones of their invention have been used in traffic signing for at least 50 years. Traffic signing comprises exit numbers. Given this fact, it is also clear to the Examiner that Hingsen-Gehrmann et al. disclose that their invention may be used as a "number plate" as claimed.

13. Claims 2, 3, and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hingsen-Gehrmann et al. (US 2002/0142121) in view of Yamamoto et al. (US 2002/0036359) and Shimizu (JP 10-055147), as applied to claim 1, and further in view of Mimura (WO 02/103629), wherein the national stage application US 2004/0218273 will be used as a direct English translation.

With regard to claims 2 and 3, Hingsen-Gehrmann et al. in view of Yamamoto et al. and Shimizu disclose all of the limitations of applicant's claim 1 in section 13 above, including disclosing glass micro beads in the light-reflective resin sheet **34** [0055];

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however they fail to disclose a focusing layer in between a specular reflective layer and said glass micro beads. They also fail to disclose an embodiment wherein the light-reflective resin sheet is a microprismatic retroreflective sheeting layer formed of microprisms and a specular reflective layer installed on the reflective side faces of the microspheres.

Mimura disclose cube-corner prismatic retroreflective elements in a light reflective resin sheet [0028] to [0030]. Mimura also discloses enclosing micro glass beads in a thin film resin layer "for adjusting their focal distance where necessary" [0032]. This reads on applicants' focusing layer.

Since Hingsen-Gehrmann et al. in view of Yamamoto et al. and Shimizu, and also Mimura are drawn to display devices using retroreflective sheets; it would have been obvious to one having ordinary skill in the art at the time the invention was made to add in a focusing layer as taught by Mimura into the device of Hingsen-Gehrmann et al. such that one could properly tune the focal length to arrive at a display device that would properly reflect light back at the correct angle. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the cube-corner prismatic retroreflective elements of Mimura in place of the glass beads in the light reflective resin sheet of Hingsen-Gehrmann et al. The results of these substitutions would have been predictable to one having ordinary skill; further, the elements are known equivalents and would perform predictably.

With regard to claims 7-9, Hingsen-Gehrmann et al. in view of Yamamoto et al. and Shimizu disclose all of the limitations of applicant's claims 1 in section 13 above;

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however, they fail to disclose the RFID communication device and antenna installed on the back of the display device; specifically, wherein a section of the specular reflective layer is removed in order to install said RFID communication device and antenna. They also fail to disclose a situation wherein the specular reflective layer is partially installed in order to form the communication device.

Mimura disclose a RFID communication device with an antenna attached to the back of the display device at [0102] to [0109]; further, they disclose removing a portion of the specular reflective layer in order to improve the sensitivity of the antenna/communication device [0108] to [0109]. Mimura also discloses a situation wherein the specular reflective layer is formed as the antenna itself [0107].

Hingsen-Gehrmann et al., Yamamoto et al., Shimizu, and Mimura are all drawn to optical display media; it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine in the RFID communication device onto the back of the display device of Hingsen-Gehrmann et al. in view of Yamamoto et al. and further in view of Shimizu. The results would have been completely predictable to one having ordinary skill; specifically, it would prevent identity thefts, wherein thieves use the RFID to pay tolls illegally.

With regard to the intended use limitation in claim 9 that "when the display device is peeled off from the installation substrate, the specular reflective layer is broken and loses its antenna function," intended use limitations are not dispositive of patentability. The device of Hingsen-Gehrmann et al. in view of Yamamoto et al. and Shimizu and

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further in view of Mimura disclose a display device identical to that claimed, and therefore the Examiner deems it capable of performing the intended use.

Double Patenting

14. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3 and 7-9 are directed to an invention not patentably distinct from claims 1-5 and 8-10 of commonly assigned Application No. 10/569,869. Specifically, see section 18 below.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned Application No. 10/569,869, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the

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commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

15. Claims 1-3 and 7-9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5 and 8-10 of copending Application No. 10/569,869 in view of Shimizu (JP 10-055147) and Mimura (WO 02/103629).

Although the conflicting claims are not identical, they are not patentably distinct from each other because they are both related to a retroreflective sheeting that is comprised of a surface protective layer (surface layer), a substrate-adhesive layer (adhesive layer), and a light-reflective resin sheet (retroreflective element layer). The destructive layer is installed in between the specular reflective layer (see copending claim 10) and micro glass beads (focusing layer) of the retroreflective element. The resins that comprise the destructive layer overlap. When the device is peeled from a

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substrate it will peel such that the specular reflective layer remains on the substrate; however, the copending application fails to disclose the device is useful as a display device or a number plate, an information display layer, an auxiliary substrate, an installation substrate, a microprismatic retroreflective sheeting layer formed of microprisms, and the RFID structure of pending claim 7-9.

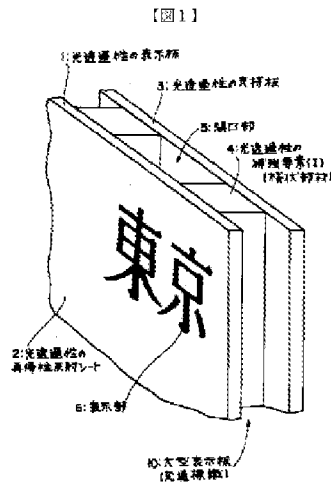
Applicant's attention is drawn to MPEP 804 where it is disclosed that "the specification can always be used as a dictionary to learn the meaning of a term in a patent claim." *In re Boylan*, 392 F.2d 1017, 157 USPQ 370 (CCPA 1968). Further, those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in an application defines an obvious variation of an invention claimed in the patent. (underlining added by examiner for emphasis) *In re Vogel*, 422 F.2d 438, 164 USPQ 619,622 (CCPA 1970).

Consistent with the above underlined portion of the MPEP citation, attention is drawn to page 1, lines 21-27 of the specification of copending Application No. 10/569869 which discloses that the retroreflective sheeting is useful as traffic signs or a number plate, which reads on the presently claimed display device; therefore, it would have been obvious to one of ordinary skill in the art to make the copending retroreflective sheeting into a display device or number plate as claimed as presently claimed.

Shimizu discloses further reinforcement-elements **4**, which reads on applicants' auxiliary substrate, between the plotting board **1**, which reads on applicants' display

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device, and a support plate **3**, which reads on applicants' installation substrate. Please see Figure 1, Abstract, and [0021].



The auxiliary substrate can be mechanically fixed on the installation substrate [0021]; further, one of ordinary skill would understand this to be intrinsic in the reference, otherwise the sign would fall to the ground.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to adhere the retroreflective sheeting of the copending claims onto the auxiliary substrate and installation substrate of Shimizu. The motivation for doing so would be that one could then create a display device that was as thin and reflective as possible, while maintaining an overall display structure that had weatherability and rigidity.

It would have also been obvious to one having ordinary skill in the art at the time the invention was made to place an information display layer in the retroreflective sheeting because that is one of the ultimate purposes behind retroreflective sheeting. One of ordinary skill would understand that retroreflective sheeting makes street signs

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visible at long distances, and therefore it would be obvious to include street signs with indicia.

Mimura disclose cube-corner prismatic retroreflective elements in a light reflective resin sheet [0028] to [0030].

Mimura disclose a RFID communication device with an antenna attached to the back of the display device at [0102] to [0109]; further, they disclose removing a portion of the specular reflective layer in order to improve the sensitivity of the antenna/communication device [0108] to [0109]. Mimura also discloses a situation wherein the specular reflective layer is formed as the antenna itself [0107].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the cube-corner prismatic retroreflective elements of Mimura in place of the glass beads in the light reflective resin sheet of the pending claims. The results of these substitutions would have been predictable to one having ordinary skill; further, the elements are known equivalents and would perform predictably.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine in the RFID communication device onto the back of the display device of the pending claims. The results would have been completely predictable to one having ordinary skill; specifically, it would prevent identity thefts, wherein thieves use the RFID to pay tolls illegally.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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16. Claims 1-3 and 7-9 are provisionally rejected under 35 U.S.C. 103(a) as being obvious over copending Application No. 10/569,869 in view of Shimizu (JP 10-055147) and Mimura (WO 02/103629), which has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the copending application, it would constitute prior art under 35 U.S.C. 102(e) if published or patented. This provisional rejection under 35 U.S.C. 103(a) is based upon a presumption of future publication or patenting of the conflicting application. Please see section 15 above for the rationale behind this rejection.

This provisional rejection might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the copending application was derived from the inventor of this application and is thus not the invention "by another," or by a showing of a date of invention for the instant application prior to the effective U.S. filing date of the copending application under 37 CFR 1.131. This rejection might also be overcome by showing that the copending application is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Response to Arguments

17. Applicant's arguments, see Remarks, filed 01/20/2009, with respect to the objections to the specification, the objections to claims 1, 4, 5, and 9, and the rejection of claims 4-6 and 9 under 35 U.S.C. 112, second paragraph have been fully considered and are persuasive. The relevant objections/rejections have been withdrawn.

18. Applicant's arguments filed 01/20/2009 have been fully considered but they are not persuasive.

Applicants argue that the drawings are correct because “one number has not been utilized to designate different items.”

The Examiner respectfully disagrees with applicants' assertion because the Examiner's objection was based upon the fact that **multiple** reference characters were used to designate the same parts. For example reference characters **1**, **21**, and **31** each refer to the surface-protective layer.

Applicants argue that the term “micro” is “both idiomatic and well-understood in this art as evidenced by the art cited by the Examiner.”

The Examiner respectfully disagrees and notes that the term “micro” is a term of degree. The term has not been defined by applicants in their specification, and it is unclear the range of sizes that would comprise “micro” from what is known in the art. Additionally, given the fact that applicants' have admitted that the term “micro” is evidenced by the art cited by the Examiner, it is clear to the Examiner that the art used in the rejection shows micro glass beads as claimed.

Applicants argue that none of the cited art teaches a “number plate” as recited in the pending claims.

The Examiner respectfully disagrees and notes that while there is no disclosure that the tamper-indicating article is an “number plate” as presently claimed, applicants attention is drawn to MPEP 2111.02 which states that “if the body of a claim fully and

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intrinsically sets forth all the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction". Further, MPEP 2111.02 states that statements in the preamble reciting the purpose or intended use of the claimed invention must be evaluated to determine whether the purpose or intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

It is the examiner's position that the purpose or intended use, i.e. as a "number plate," recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art tamper-indicating article and further that the prior art structure which is a display device identical to that set forth in the present claims is capable of performing the recited purpose or intended use; furthermore, the Examiner directs applicants' attention to [0004] of Hingsen-Gehrmann et al. which states that retroreflective sheets like the ones of their invention have been used in traffic signing for at least 50 years. Traffic signing comprises exit numbers. Given this fact, it is also clear to the Examiner that Hingsen-Gehrmann et al. disclose that their invention may be used as a "number plate" as claimed.

Applicants then argue that the limitations of claims 8 and 9 are not taught by the cited art.

The Examiner respectfully disagrees and notes that Mimura (WO 02/103629) was used to teach the limitations of claims 7-9. The Examiner made this factual determination in the Office action mailed on 10/20/2008, and applicants have not disputed the specific facts presented by the Examiner; furthermore, it is noted at page 15, lines 31-34 of applicants' specification that applicants specifically admit that Mimura teaches forming an antenna, which is apart of the specular reflective layer. This type of antenna reads directly on the limitations of claims 8 and 9. The Examiner maintains that Mimura teaches the limitations of claims 7-9, and it would have been obvious to have included these teachings in the device of Hingsen-Gehrmann et al. (US 2002/0142121) in view of Yamamoto et al. (US 2002/0036359) and Shimizu (JP 10-055147).

Applicants argue that the provisional double patenting rejection over Application No. 10/569869 has been overcome by amendment.

The Examiner agrees and has therefore made a new provisional double patenting rejection over Application No. 10/569869 in view of Shimizu (JP 10-055147), which has been necessitated by amendment.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GERARD T. HIGGINS whose telephone number is (571)270-3467. The examiner can normally be reached on M-F 9:30am-7pm est. (1st Friday off).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gerard T Higgins
Examiner
Art Unit 1794

/Gerard T Higgins/
Examiner, Art Unit 1794

/Callie E. Shosho/
Supervisory Patent Examiner, Art Unit 1794